



#9 And H. B  
SLD  
7/8/03

PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Osamu KOBAYASHI et al.

Attorney Docket No.: P67421US0

Serial No.: 10/018,297

Group Art Unit: 3676

Filed: March 11, 2002

Examiner: Vishal A. PATEL

For: LIP-TYPE HIGH-PRESSURE SEAL

AMENDMENT

BOX NON-FEE AMENDMENT.  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RECEIVED  
JUN 25 2003

Sir:

GROUP 3600

In response to the Office Action of April 3, 2003 (Paper  
No. 8), please amend the above-captioned application as follows:

IN THE ABSTRACT:

Please amend the Abstract of the Disclosure as follows:

B/ -- A high pressure shaft seal for use in a refrigerating machine wherein carbon dioxide is used as a refrigerant in lieu of "Freon". The seal has a sealing lip made of a non-elastomeric polymer material such as nylon that has a small gas permeability coefficient, a region of the sealing lip brought into contact with a shaft to be sealed being lined with a low friction lining of polytetrafluoroethylene. The gas barrier sealing lip of nylon serves to effectively block permeation of carbon dioxide gas under an extremely high pressure of from about 4 Mpa to about 12 Mpa.